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INTRODUCTION.

This REVIEW contains a general summary of the meteorological conditions which prevailed over the United States and Canada during April, 1885, based upon the reports from the regular and voluntary observers of the Signal Service and from co-operating state weather services.

Descriptions of the storms which occurred over the north Atlantic ocean during the month are also given, and their approximate paths shown on chart i.

The number of atmospheric depressions traced on chart i. and described under "Areas of low barometer" is eight, the average number for April during the last twelve years being 10.8.

The weather over the north Atlantic ocean during April, 1885, was generally moderate and without noteworthy features, except during the prevalence of the storms described as numbers 1 and 6, under "North Atlantic Storms."

The ice-region has extended unusually far to the eastward during this month, icebergs having been observed near W. 39°.

The mean temperature, as compared with the normal, exhibits no marked departure; on the Pacific coast and in the Rocky mountain districts it has been above the normal while to the eastward slight departures, both above and below the the normal are shown.

The precipitation has been decidedly below the average in the south Atlantic and east Gulf states, Tennessee, the northern plateau and north Pacific coast region; it has been largely in excess of the average in the lower Missouri valley and west Gulf states.

Tornadoes and local storms were more numerous than in the preceding month, those occurring in the southwestern states from the 19th to 22d being the severest reported. Storms of this character for the year 1885, thus far, have been neither so destructive nor so frequent as in former years.

As a result of the heavy rainfall in the southwestern states destructive freshets occurred, causing much damage to crops and loss of stock.

The spring season has been from two to four weeks later than usual in the Mississippi valley and to the eastward; in the Rocky mountain districts and on the Pacific coast the season has been unusually advanced.

In the preparation of this REVIEW the following data, received up to May 20th, 1885, have been used, viz.: the regular tri-daily weather-charts, containing data of simultaneous observations taken at one hundred and twenty-nine Signal Service stations and nineteen Canadian stations, as telegraphed to this office; one hundred and seventy monthly journals and one hundred and sixty-one monthly means from the former, and nineteen monthly means from the latter; three hundred and five monthly registers from voluntary observers; forty-four monthly registers from United States Army post surgeons; marine records; international simultaneous observations; marine reports through the co-operation of the "New York Herald Weather Service;" abstracts of ships' logs, furnished by the publishers of "The New York Maritime Register;" monthly reports from the New England Meteorological Society, and from the local weather services of Alabama, Georgia, Indiana, Minnesota, Missouri, Nebraska, Ohio, and Tennessee, and of the Central Pacific Railway Company; trustworthy newspaper extracts; and special reports.

ATMOSPHERIC PRESSURE.

[*Expressed in inches and hundredths.*]

The distribution of mean atmospheric pressure for April, 1885, determined from the tri-daily telegraphic observations of the Signal Service, is shown by the isobarometric lines on chart ii.

The mean atmospheric pressure is greatest on the north Pacific coast and in the south Atlantic states, where it ranges from 30.04 to 30.08; the barometric means are 29.95 or below over the central and southern Rocky mountain districts, British Northwest Territory, northern New England, and the Canadian Maritime Provinces; in the Rio Grande valley, southern Arizona, and over a portion of Utah the pressure is 29.9 or slightly below. Over the extensive area from the Atlantic coast between Massachusetts and North Carolina, northwestward to the north Pacific coast the mean pressures range from 29.98 to 30.08.

Compared with the mean pressures for March, there has been a slight increase (from .01 to .04) in the lower lake region, New England, and the Maritime Provinces, while in all other districts a decrease is shown. The difference is very slight along the Atlantic coast, while in all districts to the west of the Mississippi river, the mean pressure is more than .10 lower than for March, and in the Rocky mountain districts the decrease ranges from .20 to .30.

The departures from the normal pressure for April are given in the table of miscellaneous meteorological data and are also exhibited on chart iv. by lines connecting stations of equal departure. In the extreme northwest, the northern and middle plateau districts, and in California, the mean pressure is slightly below the normal, the departures ranging from .01 to .06; in all other districts the mean pressure is above the normal, the departures being less than .05, except in the lower lake region, the Atlantic coast districts, and the north Pacific coast region, where they vary from .05 to .10.

BAROMETRIC RANGES.

The monthly barometric ranges for the various Signal Service stations are given in the table of miscellaneous meteorological data; they were greatest in New England and least in the southern districts; over nearly the entire country the ranges were from .50 to .90; the greatest, 1.31 and 1.35, occurred at Boston, Massachusetts, and Block Island, Rhode Island, respectively; the least, 0.27 and 0.39, occurred at Key West, Florida, and San Diego, California, respectively.

AREAS OF HIGH BAROMETER.

Eight areas of high barometer have been traced over the territory occupied by the stations of observation, by the ap-

proximate location of the centre of greatest pressure at each consecutive morning telegraphic report, from the date of first appearance until the condition passed beyond the limits of the stations or disappeared within those limits. These high areas were generally first observed in the region north of the Missouri valley. Three advanced from the north Pacific coast; three disappeared in the southeast portion of the United States, and one developed in the lake region and passed directly eastward with increasing pressure.

I.—At the first telegraphic report of the month this area was central north of Lake Superior, accompanied by a well defined depression moving eastward over the Saint Lawrence valley. The barometer near the centre read above 30.4 and the temperature was near zero. During the succeeding day this area passed southeastward, the pressure remaining near 30.4, and it passed off the New England coast on the 2d, followed by a depression from the southwest. Snow fell in the northern portion of the lake region when the winds shifted to easterly in the southwest quadrant of this area on the night of the 1st, and this condition extended over the Saint Lawrence valley and northern New England on the 2d. It passed directly east from the coast and by the morning report of the 3d the winds had shifted to the south at the eastern stations.

II.—This area appeared north of Minnesota on the morning of the 2d; it was apparently a part of number i., and was separated from it by the advance of the storm traced as number i., on chart i. This area first moved to the southeast over the upper lakes, at the same time extending southward to Texas. On the 4th it passed over the Mississippi and Ohio valleys, the pressure falling below 30.2 while it increased in extent. The movement was slowly to the southeastward during the 4th, and it can be traced to the south Atlantic states where it disappeared as a high area on the 5th. Fair weather attended this area during the 4th and 5th, and frosts occurred as far south as the northern portions of Alabama and Georgia. The lateness of the season, however, prevented any serious injury to vegetation.

III.—This high area developed in the lower lake region on the morning of the 6th, and was apparently a part of the preceding area augmented by cold, dry air from north of the lake region. It passed directly eastward, attended by increasing pressure, and when it passed over the middle Atlantic states the barometer was .2 higher at the centre than it was in the lake region during the transit of this area. The barometer rose more than .5 on the middle Atlantic coast, and this area was preceded and followed by extended depressions, which became more clearly defined as the pressure increased at the centre of the high area. Upon reaching the Atlantic coast it extended from the Saint Lawrence valley to Florida, attended by cool, fair weather. This condition was followed during the night of the 7th by general rains which accompanied a trough of low barometer immediately to the west of this area.

IV.—This area was first observed on the north Pacific coast on the 6th. It passed east of the Rocky mountains, reaching the region north of Dakota on the 7th, and extending over the lower Missouri valley on the 8th, moving southeastward and causing the temperature to fall below freezing generally in the northwest. A light "norther" occurred on the Texas coast on the 8th, accompanied by only a slight fall in temperature along the Gulf coast. The direction of movement changed to easterly on the 8th, and by the morning of the 9th this area was central east of Lake Huron. While passing over the lake region the temperature fell to freezing, and frost occurred in Tennessee and North Carolina. This area reached the middle Atlantic coast on the 10th, when it disappeared without moving farther to the eastward, owing to the development of a storm off the south Atlantic coast and the rapid advance of a depression from the lake region.

V.—This area also appeared first on the north Pacific coast, where it remained from the 8th to the 10th before passing to the eastward. On the morning of the 11th it was central in northern Montana, and the easterly course continued with increasing pressure until the 12th, when the centre had reached Manitoba. At this report it was observed that when the pressure at the centre of the high area had increased, about the same increase of pressure had also taken place in the low area to the eastward. This area extended southward over the eastern slope of the Rocky mountains during the 11th and 12th, the centre remaining far to the north until the 13th, when it passed to the lower Missouri valley, while, at the same time, the course of the low area to the eastward inclined more to the northeast. On the following day it extended over all districts east of the Mississippi and was inclosed by an isobar of 30.3, the barometer being highest in the Ohio valley and the temperature below 40° as far south as latitude 32°. Depressions were observed to the northeast and to the west of this area on the 14th, both of which were increasing in intensity, while the high area became less clearly defined and passed off the south Atlantic coast on the 15th.

VI.—The appearance of this area to the north of the lake region on the night of the 15th was the apparent cause of the retardation of the easterly movement of the low area which was central on the eastern slope of the Rocky mountains when the preceding high area disappeared. It advanced slowly towards the New England coast during the 16th, 17th, and 18th, and was central in New England at the morning report of the 19th. It then extended southward along the Atlantic coast and was central on the middle Atlantic coast on the 20th, near Cape Hatteras, North Carolina, on the 21st, and near Charleston, South Carolina, on the 22d, when an increase of pressure appeared in the extreme northeast, causing an extension of this area along the observed portion of the coast line. The barometer rose at the centre as this area advanced from the interior toward the coast, and the secondary area from the extreme northeast transferred the centre of the high area to the north Atlantic on the 23d.

VII.—This area appeared first in the north Pacific coast region, the barometer being above the normal in that district from the 18th to the 22d; an easterly movement was observed on the 23d, the area being then central north of Dakota. The pressure increased in the northwest and there was a slight southeasterly movement on the 23d which carried the centre to the Missouri valley, near Yankton, Dakota, on the 24th. It passed over the lake region and northern New England during the 24th, 25th and 26th, and disappeared to the east of Nova Scotia, the pressure at the centre remaining near 30.3 during the transit from the Pacific to the Atlantic coast.

VIII.—This area was observed in the region north of Montana on the 25th, when low areas were central in the eastern portion of the United States and on the Pacific coast. It passed eastward to the region north of Lake Superior during the 26th and 27th, when it was reinforced by an area from the west, the two forming an area which extended over the Missouri valley on the 28th and then passed over the central valleys, disappearing within the limits of the eastern portion of the United States on the 29th.

AREAS OF LOW BAROMETER.

Eight areas of low barometer have been traced within the limits of the United States during the month. On chart i. will be found the approximate paths of the centres of each depression traced, with the position of its centre at each of the tri-daily telegraphic reports. Several minor depressions of brief duration, or not wholly within the limits of the stations, have not been traced on the chart, although reference is made to them in the text. Five of the eight depressions traced moved eastward from Colorado; two developed in the Mississippi valley and one passed eastward over British America and was at no time central within the limits of the United States. No depression could be definitely traced from the Pacific coast, although low areas on that coast preceded the development of those traced from Colorado. It may also be remarked that two of these storms disappeared after reaching the Ohio valley by filling up, and that all others reaching the coast passed to the north of Cape Henry, Virginia.

The following table gives the latitude and longitude in which each depression was first and last observed, and the average hourly velocity of each depression within the limits of the stations:

Areas of low barometer.	First observed.		Last observed.		Average velocity in miles per hour.
	Lat. N.	Long. W.	Lat. N.	Long W.	
	° ′	° ′	° ′	° ′	
No. I	39 00	102 00	47 00	66 00	29.5
II	51 00	101 00	47 00	58 00	27.0
III	43 00	91 00	43 00	77 00	21.0
IV	40 00	103 00	39 30	85 00	10.0
V	37 00	107 00	50 00	92 00	27.0
VI	37 00	93 00	47 30	57 00	26.0
VII	40 00	104 00	47 00	59 00	30.0
VIII	40 00	104 00	39 00	85 00	25.0
Mean hourly velocity					24.8

I.—The month opened with an extended trough of relatively low pressure covering the eastern Rocky mountain districts while high areas were to the east and west of this trough, a condition favorable for the development of low areas. Number i. resulted from these conditions and was first located as a cyclonic disturbance on the afternoon of the 1st, central in eastern Colorado. It first moved to the southeast apparently urged to that course by the high areas to the northward but at the same time it extended to the northeast, forming a trough-shaped depression covering the upper Mississippi and Ohio valleys and lake region within which light rains and snow fell on the 2d, while the centre of disturbance reached the southern limit of its course in Arkansas on the afternoon of the 2d. This extended area moved eastward causing general rains in all districts east of the Mississippi, and snow in the lake region on the 3d. The energy increased and the pressure declined as the centre approached the Atlantic coast, and the depression became a well-defined circular cyclone while passing over the middle Atlantic states during the night of the 3d and morning of the 4th. It followed the coast line after reaching the vicinity of Cape May, attended by dangerous gales along the coast north of Cape Hatteras, and dangerous winds also on the west Florida coast when this storm was central in Virginia. The gales attending this storm reached their maximum force on the New England coast during the 4th. The advance of a second depression from the west extended the area of this storm, thereby diminishing the barometric gradient as it passed over the maritime stations to the northeast, and caused the storm to decrease in energy after passing north of New England. The second depression, which is not traced on the storm-track chart, passed north of the lake region during the 4th and 5th, and developed considerable energy on the last-named date, causing strong gales in the eastern portion of the lake region during the night of the 5th.

II.—This depression was at no time within the limits of the stations of observation, but reports from the northern stations indicated its easterly movement. It was first observed at the afternoon report of the 5th far to the north of Montana and probably had its origin on the north Pacific coast or further to the west. The centre moved in a southeasterly course and the disturbance showed great energy while passing over the Saskatchewan valley, and violent winds occurred in the northern Rocky mountain districts during the 6th when this depression was central north of Dakota. The barometer rose from 29.3 to 29.5 as the centre approached the lake region, but the dangerous winds extended over the lakes although with less force than the winds attending the depression in the far west. During the night of the 7th the winds shifted to westerly in the lake region, with increasing force, and in the upper lake region freezing weather occurred. By the morning of the 9th this storm had reached the Maritime Provinces and the cold wave following it caused freezing weather in New England and the middle Atlantic states; strong gales occurred at the extreme northeast stations when this depression passed to the eastward over the Atlantic, but the gradual filling up of the depression as it advanced from the centre of the continent and its extension upon reaching the Atlantic indicated that it was losing energy as it advanced.

III.—A slight depression was observed to the north of Dakota on the 9th, moving southeasterly toward the upper lakes. When this disturbance was central near Lake Superior a secondary depression was formed in the trough of low barometer which extended southward to the lower Missouri valley. When the winds shifted to westerly in this trough of low barometer a well-defined secondary cyclone was formed, central near LaCrosse, Wisconsin, at the 3 p. m. report of the 10th. This disturbance became the principal at the succeeding reports and it passed directly eastward, developing energy and becoming more clearly defined as a circular storm as it moved over the lower lake region, causing dangerous winds accompanied by snow and sleet. After passing to the east of Lake Ontario the pressure at the centre increased and the centre of the disturbance, although apparently moving eastward, could not be definitely located after the morning of the 12th, when the storm had exhausted its maximum energy.

IV.—This depression developed in Colorado during the night of the 13th, but the preceding reports showed an extended barometric depression covering the plateau and the Pacific coast regions, while a high area covered the eastern slope of the Rocky mountains. No cyclonic movement of the wind was observed until after the midnight report of the 13th, and from that time the depression advanced to the eastward until it reached the lower Missouri valley where it was retarded and forced to the westward by the high area then passing to the southeastward over the lake region. It gained sufficient energy to advance during the 16th, but only reached the central Ohio valley, where it filled up, the barometer remaining low in the southwest.

V.—The barometer continued low in the plateau and Rocky mountain regions after the advance of the preceding depression to the east. This condition of pressure continued until the 20th before the development of a depression of sufficient energy to assume a motion of translation. The afternoon report of the 20th showed high areas over the Atlantic coast and in the northwestern portion of the United States, with a tendency of the last named to press southward to the west of the low area, which had remained in the central Rocky mountain region several days. The course of this depression to the northeast by the extension of the isobars towards Manitoba and its rapid movement in that direction during the succeeding day was due to the cold air from the mountain regions flowing with high velocity to the south over Colorado. Heavy snows prevailed in Colorado on the 21st with temperature below freezing, while the temperature ranged from 50° to 60° in the Missouri valley as far north as Bismarck, Dakota. This disturbance assumed an elliptical form during the 21st, central near the northern Nebraska line and accompanied by freezing weather and heavy snow in Dakota, Wyoming, and Colorado on the afternoon of the 21st and by warm rains in the Missouri valley. These conditions continued at the midnight report, the storm moving almost directly north and the isotherms of 60°, 50°, 40° and 30° being almost north and south between Iowa and Wyoming. The pressure decreased at the centre as this storm moved to the northward until the centre passed beyond the limits of the stations, when its course changed to the northeast, after which the area increased and the barometer rose at the centre, indicating that this storm developed its maximum intensity while within the limits of the United States, and that it was filling up after passing north of the forty-eighth parallel.

VI.—This area developed in the Arkansas valley on the 25th, when a high area was passing over the lake region and a second depression also existed in the northwest. These depressions moved towards the lower lake region where they united on the morning of the 26th, with considerable increase of energy in the resulting storms; but the afternoon report of the 26th showed two depressions connected by a trough of

low barometer—one near Cape May, New Jersey, and the other near Kingston, Ontario. These depressions united near Yarmouth, Nova Scotia, on the morning of the 27th, and the single disturbance disappeared to the northeast over Newfoundland on the 28th.

VII.—This low area also developed in Colorado to the southwest of a high area and after the period of low pressure in California and the south and central plateau regions, from the 25th to the 27th, when a depression of slight energy formed in eastern Colorado and moved rapidly eastward to the lower lake region during the succeeding twenty-four hours. The storm extended southward as it passed over the middle Atlantic states to southern New England during the 28th, causing severe gales at stations on the coast north of Wilmington, North Carolina. While passing along the New England coast the barometer fell to 29.2 at Boston, and the strongest gales of the month occurred. The barometer reached its minimum when this storm was central near Boston, and the pressure increased slightly during the passage of the storm to Nova Scotia, but when last observed in the extreme northeast the barometer was again falling at the centre.

VIII.—This area followed the general course of number vii, originating in eastern Colorado and advancing to the lower Ohio valley, where it was central at the close of the month. General rains attended the advance of this depression eastward, and numerous local storms occurred in the southwest and in the lower Mississippi valley. A further description of this storm will be given in the May REVIEW.

NORTH ATLANTIC STORMS DURING APRIL, 1885.

[*Pressure expressed in inches and in millimetres; wind-force by scale of* 0-10.]

The paths of the atmospheric disturbances that have appeared over the north Atlantic ocean during the month are determined, approximately, from international simultaneous observations furnished by captains of ocean steamships and sailing vessels; abstracts of logs and other data collected by the Signal Service agencies at the ports of New York, Boston, and Philadelphia; reports furnished through the co-operation of the "New York Herald Weather Service," and from other miscellaneous data received at this office up to May 21st, 1885.

Of the eight depressions charted, two, viz: numbers 2 and 8, were probably continuations of the storms traced over the United States and Canada as low areas i. and vi., but the reports covering the region north of 45° N. and between 45° W. and the coast of Newfoundland are not sufficiently numerous to admit of the tracing of a continuous track. Numbers 3 and 4 apparently developed near N. 40° and between W. 60° and 70°, while the remaining disturbances were first observed to the eastward of the fiftieth meridian. The general direction of movement of the storm-centres in April, 1885, was about east-northeasterly; the depressions which traversed the ocean during the first half of the month apparently changed their direction on approaching the European coasts, and moved to the southeastward over the Bay of Biscay. The only severe storms of the month were those traced as numbers 1 and 6; in these the barometer fell below 28.9 (734.0) and both were accompanied by heavy gales and very high sea. Dense fogs were of frequent occurrence during the month.

The following are brief descriptions of the storms charted:

1.—This depression appeared between N. 55° and 50°, and W. 20° and 30° on the 3d, having apparently moved from the regions north of the sixtieth parallel. By the 3d the pressure over the ocean within the above-mentioned limits had decreased from 30.3 (769.6) to 29.5 (749.3) and the wind had freshened to the force of a moderate gale; on the 4th the decrease of pressure extended to the British Isles and the disturbance was moving slowly east-southeastward towards the coast. During the night of the 4–5th the wind increased to a strong gale and the barometer fell rapidly; at midnight of the 4th the s. s. "City of Richmond," A. W. Lewis, commanding, in N. 48° 20′, W. 28° 30′, had barometer 29.48 (748.8), wnw. gale of force 9; on the 5th the centre of disturbance was between W. 15° and 20° and the barometer ranged from 28.7 (729.0) to 28.95 (735.3.) Strong w. and nw. gales prevailed over the ocean between N. 45° and 50° and from W. 30° eastward to W. 15°, with strong se. winds to gales over the British Isles, and along the French coast. This weather continued during the 6th, when the centre of disturbance lay to the southwest of Ireland; during the day it passed southeastward over the Bay of Biscay; the wind shifted to e. over the British Isles and blew strongly, while the heavy n. and nw. gales continued without abatement over the ocean west of the fifteenth meridian.

The following are the lowest pressures reported: s. s. "State of Nevada," J. A. Stewart, commanding, in N. 54° 43′, W. 15° 43′, on the 5th, barometer 28.76 (730.5), wind s., force 5; s. s. "Adriatic," H. Parsell, commanding, in N. 51° 2′, W. 15° 50′, barometer 28.96 (735.6), wind wsw., force 9, very heavy sea, rain squalls; s. s. "Hanoverian," B. Thompson, commanding, in N. 52° 32′, W. 23° 56′ at noon, had lowest barometer, 29.05 (737.9), at 4 a. m. of the 5th, wind blowing a hurricane from nw. with terrific sea; ship hove-to, and received considerable damage about the decks, the heavy seas smashing boats, sky lights, doors, etc.; s. s. "Anchoria," Captain Small, commanding, reported a gale from s. at 1 a. m. of the 5th, gradually backing and ending at ne. at 8 a. m. of the 6th; the lowest barometer was 29.14 (740.1) at 6 p. m. of the 5th, in N. 55,° W. 18°. The s. s. "Wandrahm" N. J. Hundewadt, commanding, had a whole gale from w. by s. to nw.; the gale began at 11 p. m. of the 4th, and at 5 a. m. of the 5th, in N. 48° 30′, W. 17° 0′, the barometer read 29.1 (739.1), wind shifting to w. and nw.; the gale lasted until 4 a. m. of the 7th. The s. s. "Nürnberg," A. Jaeger, commanding, reported as follows: "from April 5th to 6th, in N. 49°, W. 18° 5′, we had a very heavy storm from wnw. and nw., accompanied by rain and hail squalls of hurricane force and a very high and dangerous cross sea from sw., w. and nw. The lowest barometer reading was 29.19 (741.4), at 5 a. m. on the 6th, wind nw., force 10; ship's course, wsw., ½ w., making two knots an hour at full speed ahead; the wind blew hardest at 10 a. m., from which hour it began to decrease and the barometer rose slowly. At 9.30 p. m. of the 5th the mast-heads and yard-arms were tipped with Saint Elmo's fire, and vivid lightning came out of the heavy black clouds; a ball of fire exploded with a loud noise resembling the report of a gun; after this phenomenon the gale increased to hurricane force."

The following reports refer to the 6th: s. s. "Iowa," S. Waters commanding, in N. 51° 02′, W. 12° 24′, reported barometer 28.94 (735 1), wind sse., force 5, raining; s. s. "Australia," A. McRichie, commanding, in N. 48° 38′, W. 10° 34′, barometer 28.86 (733.0), wind sw., force 8, misty and rainy, very high w. sea; s. s. "Noordland," H. Nickels, commanding, at 6 p. m. of the 6th, in N. 49° 00′, W. 16° 00′, had a whole gale from w. by n. to ne., lowest barometer 29.28 (743.7); s. s. "Matthew Bedlington," T. Kirby, commanding, in N. 47° 40′, W. 20° 00′, at 3 p. m., barometer 29.36 (745.7), wind sw. shifting to w. and nw., and then to n. and ne., force 9, with unusually high sea; s. s. "Nederland," Captain Griffin, commanding, at noon of the 6th, in N. 48°06′, W. 21° 10′, had barometer 29.65 (753.1), severe storm from nw. and w. with very heavy sea, doing considerable damage about the decks and carrying away the bridge, etc.; s. s. "British Prince," S. Nowell, commanding, in N. 48° 57′, W. 29° 08′, barometer 29.63 (752.6), wind n., fierce snow squalls and mountainous sea, gale at times shifting to nw. and w.

The following reports are taken from various newspapers: 3d, ship "Cyrus Wakefield," in N. 49° 19′, W. 21° 26′, was hove to under bare poles for four days; 4th, ship "Falstaff," in N. 47° 13′, W. 18° 50′, very heavy wnw. gale, stove boats, etc.; s. s. "Germanic," five hundred miles west of Fastnet, encountered terrific storms during the night of the 4–5th; vessel sustained serious damage and returned to Queenstown; 5th, s. s. "Boston City," in N. 50° 17′, W. 17° 13′, hurricane from ssw. to nnw., lasting twenty-four hours, ship hove to; ship "Cressington," in N. 46° 21′, W. 19° 16′, heavy gale with very heavy sea, damaging decks, etc.; ship "Lucille," in N.